

**CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

<b>Product name</b>	TLR4, Human, clone 3C3	<b>Expiry date</b>	-
<b>Catalog number</b>	HM2247-FS	<b>Amount</b>	0.5 mg
<b>Lot number</b>	-	<b>Concentration</b>	>0.5 mg/ml
<b>Volume</b>	-	<b>Conjugate</b>	None
<b>Formulation</b>	0.2 µm filtered in PBS	<b>Purification</b>	Protein G
<b>Host Species</b>	Mouse IgG1		
<b>Endotoxin</b>	<24 EU/mg		
<b>Storage</b>	4°C		

**Application notes**

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #								
Yes				•	•			
No								
N.D.	•	•	•			•	•	•

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

- FS: the antibody can be used for functional studies as antagonist for TLR4. It can be used by blocking LPS-induced cytokine functions.

**General Information**

<b>Description</b>	The monoclonal antibody 3C3 reacts with human Toll-like receptor 4 (TLR4, CD284). TLRs belong to a family of proteins that specifically recognize and sense microbial products. They are highly conserved throughout evolution. In <i>Drosophila</i> , toll is required for the anti-fungal response, while the related 18-wheeler is involved in antibacterial defences. TLRs identified as type I transmembrane signalling receptors act as innate immune recognition receptors against many pathogens. TLR4 is a functional receptor for gram-negative bacterial lipopolysaccharides (LPS). TLR4 associates with MD-2 which is absolutely required for LPS-induced activation of TLR4. TLR4 has been identified next to MD-2 and CD14 as a receptor that is central to the innate immune response to LPS of Gram-negative bacteria. The monoclonal antibody 3C3 is a TLR4 function-blocking antibody that is useful for studies on the role of TLR4 as a receptor for LPS induced cytokine production by TLR4 bearing cells.
<b>Immunogen</b>	CHO cells expressing chimeric human TLR4/MD-2 fusion protein.
<b>Aliases</b>	Toll-like receptor 4, CD284
<b>References</b>	1. Stribos, E et al; Renal expression of Toll-like receptor 2 and 4: Dynamics in human allograft injury and comparison to rodents. <i>Molecular Immunology</i> 2015, 64: 82
<b>Storage&amp;stability</b>	Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.
<b>Precautions</b>	For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC  
Brenda Teunissen

Date  
07/10/2019

Do you have any questions or comments regarding this product? Please contact us via [support@hycultbiotech.com](mailto:support@hycultbiotech.com).